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Special Provision for Fine Aggregate for Portland Cement Concrete and Mortar

January 12, 2001

This special provision was originally developed by the Bureau of Materials and Physical Research in conjunction with a subcommittee within the Department's PCC Technical Group, which consisted of members of IDOT and Industry. This special provision expands the use of stone sand in portland cement concrete and mortar.

The previous version contained a correction that allows increased amounts of minus 75 $\mu$ m (#200) material for Class A quality. This version allows the use of FA 20 stone sand produced by air separation.

This special provision should be inserted into all contracts using portland cement concrete and mortar.

The districts should include the BDE Check Sheet with the applicable BDE Special Provisions marked for the April 27, 2001 letting and for subsequent lettings and the Project Development and Implementation Section will include the paper copy in the contract.

This special provision will be transferred through the E-mail System to the district offices on January 12, 2000.

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## FINE AGGREGATE FOR PORTLAND CEMENT CONCRETE AND MORTAR (BDE)

Effective: November 1, 2000

Revised: April 1, 2001

Revise Article 1003.02 to read as follows:

"1003.02 Fine aggregate for Portland Cement Concrete and Mortar. The aggregate shall meet the requirements of Article 1003.01 and the following specific requirements:

- (a) Description. The fine aggregate shall consist of washed sand, washed stone sand, or a blend of washed sand and washed stone sand approved by the Engineer. Stone sand produced through an air separation system approved by the Engineer may be used in place of washed stone sand.
- (b) Quality. The fine aggregate materials in the gradations specified for portland cement concrete shall meet Class A Quality, except that the minus 75μm (No. 200) sieve AASHTO T11 requirement in the Fine Aggregate Quality Table shall not apply to washed stone sand or any blend of washed stone sand and washed sand approved by the Engineer. The fine aggregate for masonry mortar shall meet Class A Quality or, in the case of natural sand, shall meet the deleterious quantity limits for Class A Quality.
- (c) Gradation. The washed sand for portland cement concrete shall be Gradation FA 1 or FA 2. Washed stone sand for portland cement concrete, which includes any blend with washed sand, shall be Gradation FA 1, FA 2, or FA 20. Fine aggregate for masonry mortar shall be Gradation FA 9.
- (d) Use of Fine Aggregates. The blending, alternate use, and /or substitution of fine aggregates from different sources for use in portland cement concrete will not be permitted without the approval of the Engineer. Any blending shall be by interlocked mechanical feeders at the aggregate source or concrete plant. The blending shall be uniform, and the equipment shall be approved by the Engineer."

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